

## CLAIMS

What is claimed is:

1. Drive axle assemble comprising:  
an enveloping worm pinion in meshing engagement with a face type gear;  
a housing with bearing support;  
10 a traction unit adapted for connection to said face gear, having two members for connection to axle shafts.
2. Drive axle assemble as recited in claim 1 wherein said enveloping worm pinion having threads with less than one revolution.
3. Drive axle assemble as recited in claim 1 wherein said traction unit is gear differential having side gears for connection to axle shafts in mesh with intermediate gears rotatably located on a carrier, and said carrier attached 15 to said face type gear.
4. Drive axle assemble as recited in claim 1 wherein said traction unit has two sets of clutches, each clutch has first member and second member attached to said face type gear.  
20
5. Drive axle assemble comprising:  
a first enveloping worm pinion in meshing engagement with a first face type gear;  
a first housing with bearing support;  
25 a first traction unit adapted for connection to said first face gear, have two members for connection to axle shafts;  
an additional drive axle assemble with pinion linked to said enveloping worm.
6. Drive axle assemble as recited in claim 5 wherein said additional drive axle assemble comprising:  
a second enveloping worm pinion in meshing engagement with a second face type gear;  
a second housing with bearing support;  
30 a second traction unit adapted for connection to said second face gear, having two members for connection to axle shafts.

- 5           7. Drive axle assemble as recited in claim 5 wherein said enveloping worm pinion has threads with less than one revolution.
8. Drive axle assemble as recited in claim 5 wherein said additional drive axle assemble comprising:
- 10           a bevel type pinion in meshing engagement with a ring gear;
- an additional housing for said additional pinion with bearing support;
- an additional traction unit adapted for connection to said additional face type gear, having two members for connection to axle shafts.
- 15           9. Drive axle assemble as recited in claim 5 wherein said traction unit is gear differential with side gears for connection to axle shafts in mesh with intermediate gears rotatably located on a carrier, and said carrier attached to said face type gear.
10. Drive axle assemble as recited in claim 5 wherein said traction unit has two sets of clutches, each clutch has first member for connection to axle shafts and second member attached to said face type gear.
- 20           11. A worm differential for drive axle assemble, comprising:  
a differential case;  
a carrier;  
two said face gears opposing each other, providing traction torque;  
intermediate enveloping worms in mesh with said face gears rotatably located on said carrier.
- 25           12. A worm differential for drive axle assemble as recited in claim 11 wherein said enveloping worms have threads with less than one revolution.
13. A worm differential for drive axle assemble as recited in claim 12 wherein said enveloping worms have threads with less than 90 degree of revolution.